If you are using a printed copy of this procedure, and not the on-screen version, then you <u>MUST</u> make sure the dates at the bottom of the printed copy and the on-screen version match.

The on-screen version of the Collider-Accelerator Department Procedure is the Official Version.

Hard copies of all signed, official, C-A Operating Procedures are kept on file in the C-A ESHQ

Training Office, Bldg. 911A.

C-A OPERATIONS PROCEDURES MANUAL

on of EAGAL II7	The Target Desk Control	System At MCR_2		
Text P	ages 2 through 5			
Hand Processed Changes				
<u>Date</u>	Page Nos.	<u>Initials</u>		
	Text P <u>Hand P</u>			

Approved: _	<u>Signature on File</u>	
	Collider-Accelerator Department Chairman	Date

P. Ingrassia

3.13 Operation of EAGAL II -- the Target Desk Control System At MCR_2

1. Purpose

To familiarize MCR Operators with the use of EAGAL II -- the Target Desk Control System located at MCR_2-2.

EAGAL II, an Allen Bradley PanelView 1400 serves two purposes. First it makes Digi-Talker Obsolete. In general, Facility and Experimental Support (FES), formerly known as Experimental Area Group (EAG) alarms will appear on both the ADT and the PanelView. Operators need monitor the PanelView only in the case where communications are lost between the PanelView and the controls system Alarm Display Task (ADT). IF communications are lost, THEN an audible tone will be generated to warn operators of the loss of communications and to warn operators to pay attention to alarms on the display. The second function of EAGAL II is to replace the old "Infoton Terminal/Toldo Box/Target Desk Control System" that had applications during emergency situations in building 912, the SEB experiment halls.

1.1 List of Target Desk Control System Functions

- a. Bldg. Roof Gas Detector Master Reset: Resets all explosive gas detector alarms from detectors located on the roofs (inside exhaust fan enclosures) that monitor building air.
- b. Bldg. Roof Fan Crash: Enables operator to "crash" various building exhaust fans in the event of a gas leak or fire.
- c. Building Gas Detector Resets: Reset gas detector alarms specific to a certain experimental building (e.g. Target Building South, Target Building North)
- d. Target Bldg. Roof Fan Reset: Resets all roof fans in target building.
- e. East Exp. Area Bldg. (EEA) Roof Fan Reset: Resets all roof fans located in the east experimental building.
- f. East Experimental Building Additions (EEBA) Roof Fan Reset: Resets all roof fans in the EEBA building.
- g. Bldg. Evacuate Alarm Reset: Enables operator to reset all evacuate alarms.
- h. Local Gas Detector Resets: Reset gas detector alarms on a specific beam line (e.g. C4 line, MPS-1 line).
- i. Diesel Fault Resets: Reset emergency generator alarms for generators 1-4.
- j. Cluster Lockout: Enables operator to lockout single cluster systems.

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2. Responsibilities

- 2.1 MCR Operators are responsible for the execution of this procedure.
- 2.2 The Collider-Accelerator Support (CAS) Watch Supervisor is responsible for authorizing the operation of any reset or crash.

3. Prerequisites

- 3.1 An alarm appears on the FES [Experimental Area Group Alarm (EAGAL)] ADT monitor and/or on EAGAL II that warrants a response utilizing the Target Desk Control System.
- 3.2 A call from the CAS watch supervisor requesting that the Operator on duty use the Target Desk Control System.

4. Precautions

4.1 The configuration of the EAGAL II software will be controlled according to standard C-A Department PLC configuration control practice found in C-AD OPM 13.6.6 "Programmable Device Documentation Procedure".

5. <u>Procedure</u>

- 5.1 FES [EAG] ALarms (EAGAL)
 - 5.1.1 FES [EAG] alarms appear both on EAGAL II and on appropriately filtered ADT screens.
 - 5.1.2 IF communication is lost between the PLC that generates FES [EAG] alarms and the controls system, then an audible alarm will sound at the PanelView to warn operators that communications are lost and to inform operators that the PanelView has become the primary means to view FES [EAG] alarms.
 - 5.1.3 Acknowledging an alarm on one display (EAGAL II/ADT) will acknowledge the alarm on that display (EAGAL II/ADT) and will not acknowledge the alarm on the other display (ADT/EAGAL II).
 - 5.1.4 Silence alarms by pressing **F21** while on the **Main Page**
 - 5.1.5 Report all alarms to the CAS watch
- 5.2 Target Desk Control System

- 5.2.1 Navigating the display
 - 5.2.1.1 Use the arrow keys to navigate (up/down) the menus
 - 5.2.1.2 Use the "→" key to choose the highlighted menu selection.
 - 5.2.1.3 Use the function (\mathbf{F}) keys as directed by a "red pop-up" to change the screen to a page where an alarm is to be found.

Note 2:

Function key definitions may vary from page to page

- 5.2.2 Using the Target Desk Control System
 - 5.2.2.1 Turn systems **ON** (crash) or **OFF** (reset) when instructed to do so by a member of the CAS watch
 - 5.2.2.1.1 To RESET the building Roof Gas Detector Master Reset, choose any BUILDING from the Main Menu and press the function switch $(\mathbf{F_{nn}})$ corresponding to the MASTER RESET.
 - 5.2.2.1.2 To CRASH a building Roof Fan, choose the particular BUILDING from the Main Menu and press the function switch $(\mathbf{F_{nn}})$ corresponding to that fan CRASH.
 - 5.2.2.1.3 To RESET a building Roof Gas Detector, choose the particular BUILDING from the Main Menu and press the function switch (\mathbf{F}_{nn}) corresponding to that gas detector RESET.
 - 5.2.2.1.4 To RESET a building Roof Fan, choose the particular BUILDING from the Main Menu and press the function switch (\mathbf{F}_{nn}) corresponding to that fan RESET.
 - 5.2.2.1.5 To RESET the building Evacuate, choose EVAUATES from the Main Menu and press the function switch (\mathbf{F}_{nn}) corresponding to that evacuate RESET.
 - 5.2.2.1.6 To RESET a local Gas Detector, choose TARGET SYSTEMS from the Main Menu, then choose a beam line, then press the function switch (\mathbf{F}_{nn}) corresponding to that beamline gas detector RESET.

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- 5.2.2.1.7 To RESET a Diesel Generator Fault, choose CRANES/EMERGENCY GENERATORS from the Main Menu, then press the function switch (\mathbf{F}_{nn}) corresponding to that generator RESET.
- 5.2.2.1.8 To Lockout a Cluster, choose CLUSTERS from the Main Menu, then press the function switch (\mathbf{F}_{nn}) corresponding to that cluster LOCKOUT.

Note 3:

Locking out a cluster will turn off a number of magnets (power supplies) grouped by the cooling tower that feeds the magnet.

Note 4:

IF all of the power supplies do not turn off within ten seconds after the Cluster Lockout button is pressed, THEN a "HUNG BREAKER" alarm will appear.

Report all "HUNG BREAKER" alarms to the CAS Watch Supervisor.

6. **Documentation**

None

7. <u>References</u>

None

8. Attachments

None